

Beth E. Borowsky, et al.  
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**Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the claims:**

Claim 1 (Currently amended) An isolated nucleic acid encoding a ~~mammalian~~ human SNORF33 receptor, wherein the ~~mammalian~~ human SNORF33 receptor has ~~the~~ an amino acid sequence ~~of the human SNORF33 receptor (SEQ ID NO: 6)~~ identical to 1) that shown in SEQ ID NO: 6 or 2) that encoded by plasmid pcDNA3.1-hSNORF33-f (ATCC Patent Depository No. PTA-398) or 3) that encoded by plasmid pEXJ-hSNORF33-f (ATCC Patent Depository No. PTA-570); or a sequence having above 75% amino acid sequence identity thereto and is activated by any of tyramine, tryptamine, or  $\beta$ -phenyl-ethylamine.

Claim 2 (Original) The nucleic acid of claim 1, wherein the nucleic acid is DNA.

Claim 3 (Original) The DNA of claim 2, wherein the DNA is cDNA.

Claim 4 (Original) The DNA of claim 2, wherein the DNA is genomic DNA.

Claim 5 (Original) The nucleic acid of claim 1, wherein the nucleic acid is RNA.

Claim 6 (Canceled)

Claim 7 (Currently amended) The nucleic acid of claim [6] 1, wherein the human SNORF33 receptor has an amino acid sequence identical to that encoded by the plasmid pcDNA3.1-

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hSNORF33-f (ATCC Patent Depository No. PTA-398).

Claim 8 (Currently amended) The nucleic acid of claim [6] 1, wherein the human SNORF33 receptor has an amino acid sequence identical to that encoded by the plasmid pEXJ-hSNORF33-f (ATCC Patent Depository No. PTA-570).

Claim 9 (Currently amended) The nucleic acid of claim [6] 1, wherein the human SNORF33 receptor has an amino acid sequence identical to the amino acid sequence shown in ~~Figures 6A-6B (SEQ ID NO: 6)~~ SEQ ID NO: 6.

Claims 10-15 (Canceled)

Claims 16-18 (Canceled)

Claim 19 (Original) A vector comprising the nucleic acid of claim 1.

Claim 20 (Canceled)

Claim 21 (Currently amended) [A] The vector of claim 19 ~~or 20~~ adapted for expression in a cell which comprises the regulatory elements necessary for expression of the nucleic acid in the cell operatively linked to the nucleic acid encoding the receptor so as to permit expression thereof, wherein the cell is a bacterial, amphibian, yeast, insect or mammalian cell.

Claim 22 (Original) The vector of claim 21, wherein the vector is a baculovirus.

Claim 23 (Original) The vector of claim 19, wherein the vector is a plasmid.

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Claim 24 (Original) The plasmid of claim 23 designated pcDNA3.1-hSNORF33-f (ATCC Patent Depository No. PTA-398).

Claim 25 (Original) The plasmid of claim 23 designated pEXJ-hSNORF33-f (ATCC Patent Depository No. PTA-570).

Claims 26-27 (Canceled)

Claim 28 (Original) A cell comprising the vector of claim 21.

Claim 29 (Currently amended) [A] The cell of claim 28, wherein the cell is a non-mammalian cell.

Claim 30 (Currently amended) [A] The cell of claim 29, wherein the non-mammalian cell is a *Xenopus* oocyte cell or a *Xenopus* melanophore cell.

Claim 31 (Currently amended) [A] The cell of claim 28, wherein the cell is a mammalian cell.

Claim 32 (Currently amended) [A] The mammalian cell of claim 31, wherein the cell is a COS-7 cell, a 293 human embryonic kidney cell, a NIH-3T3 cell, a LM(tk-) cell, a mouse Y1 cell, or a CHO cell.

Claims 33-34 (Canceled)

Claim 35 (Currently amended) [A] The cell of claim [24] 28 or 29, wherein the cell is an insect cell.

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Claim 36 (Currently amended) [An] The insect cell of claim [29] 35, wherein the insect cell is an Sf9 cell, an Sf21 cell or a Trichoplusia ni 5B-4 cell.

Claim 37 (Currently amended) A membrane preparation isolated from the cell of any one of claims 28, 29, 31, 32, ~~33, 34~~ or 35.

Claims 38-168 (Canceled)

Claim 169 (Canceled)

Claim 170 (Canceled)